

inspection & permit services LLC

ron perkerewicz

adam perkerewicz

Licensed Home Inspectors

10000 central valley rd. n.e.

bremerton, wa 98311

360-307-8512 cell 360-731-8398

perk120@aol.com



Since 1997



International Association of
Certified Home Inspectors

10/14/2022

RE: 2021 Building Codes, Group 2
WSEC R-032

Dear Washington State Building Code Councilors,

I am writing today on behalf of BIAW, KBA and myself to voice concerns over the ability to choose natural gas for space and water heating. and the proposed section that would require the heat pump water heater and air handler be placed inside the conditioned space.

Many others will address the cost and effect of not allowing for natural gas to be used as an energy source and I will concentrate my comments on the location of the water heater and air handler.

My previous experience has been in developing codes as a past chairman of ICBO and a member of the first ICC Board of Directors I spent over 24 years as a building code official and involved in the code development process, since that time I have spent over 25 years as a private building and home inspector.

Our company performs over 600 home inspections annually with a large share of those being new homes that have the heat pump water heaters installed. A service that our company provides is in doing a one-year warranty inspection of the home. During these one-year warranty inspections we have come to find that a large share of the heat pump water heaters, especially those that are inside a room in the building, are set on a conventional non-heat pump mode. When asked why the units are turned off of the most energy efficient mode the answer is two-part first, they are noisy and second the room is extremely cold usually up to 20° colder than the surrounding room.

While there are provisions to install the HP water heaters inside of a small room (less than the approximate 700 to 900 ft.² required without any additional air supply) the requirements that need to be met do not seem practical or in concert with the theory of saving energy.

If placed in a closet one must have a fully louvered door to provide intake and exhaust air. This continues to have the noise transmitted into the home and a point of extremely cold air compared to the rest of the house.

Some of the HP water heaters have provisions for ducted exhaust with the intake coming from a door that is cut up from the floor or from a separate intake duct. The ducted exhaust then requires a 5-inch diameter or larger hole in the exterior wall (this is exactly what you

are trying to eliminate is penetrations of the exterior envelope) or it is vented into the attic. Venting into the attic then creates a temperature differential that can lead to condensation and moisture accumulation in the attic area and again it penetrates the exterior envelope. With the undercut door the noise continues to be an issue in the home.

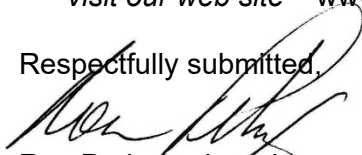
The minimal savings that can occur by having the unit placed in the garage as seems to be the current practice should be allowed.

If you're really trying to save energy you need to make it consumer friendly without the need for education or special instructions as to why these units do what they do or where they are placed. Most people do not understand the purpose of these, in fact most of them don't even know that they're supposed to clean the filter on the top of the unit on a regular basis to make them function correctly.

Thank you for the opportunity to provide input on the Group 2 building codes.

For clarification of some terms, sample diagrams and drawings of requirements for handrails etc. visit our web site www.inspectionandpermitservices.com

Respectfully submitted,



Ron Perkerewicz c.b.o.
Certified Building Official #486, NACHI #70402404
Washington State Structural Pest Inspector # 61656
Washington State Licensed Home Inspector #249

Adam Perkerewicz ,
Washington State Structural Pest Inspector # 73078
Washington State Licensed Home Inspector #250, NACHI #8021902



Licensed Home inspectors
Licensed Pest Inspectors

